

PAT 99141 PCT

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What is claimed is:

1. A coating material curable thermally and with actinic radiation, comprising

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(a1) at least one constituent containing

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(a11) at least two functional groups which serve for crosslinking with actinic radiation, and if desired

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(a12) at least one functional group which is able to undergo thermal crosslinking reactions with a complementary functional group (a22) in the constituent (a2),

and

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(a2) at least one constituent containing

(a21) at least two functional groups which serve for crosslinking with actinic radiation, and

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(a22) at least one functional group which is able to undergo thermal crosslinking reactions with a complementary functional group (a12) in the constituent (a1),

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and also, if desired, comprising

(a3) at least one photoinitiator,

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(a4) at least one thermal crosslinking initiator,

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(a6) at least one coatings additive, and/or

(a7) at least one thermally curable constituent,

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with the proviso that the coating material contains at least one thermally curable constituent (a7) if the constituent (a1) has no functional group (a12).

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2. The coating material as claimed in claim 1, wherein the functional groups (a11) and (a21) comprise olefinically unsaturated groups or epoxide groups, especially olefinically unsaturated groups, the functional groups (a12) comprise hydroxyl groups, and the complementary functional groups (a22) comprise isocyanate groups.

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20 3. The coating material as claimed in claim 1 or 2, wherein the constituent (a1) comprises a urethane (meth)acrylate and the constituent (a2) comprises a (meth)acrylate-functional (meth)acrylate copolymer containing free isocyanate groups and/or a (meth)acrylate-functional polyisocyanate.

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4. The use of the coating material as claimed in any of claims 1 to 3 for sealing SMCs (sheet molded compounds) and BMCs (bulk molded compounds).

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5. The use of the coating material as claimed in any of claims 1 to 3 in automotive OEM finishing, automotive refinish, the coating of plastics, furniture coating, and industrial coating, including coil coatings and container coatings, for producing clearcoats and multicoat color and/or effect coating systems.

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- 5 6. A process for sealing SMCs (sheet molded compounds) and BMCs (bulk molded compounds) by applying a primer coat of a coating material and curing the primer coat, which comprises using a coating material as claimed in any of claims 1 to 3.
- 10 7. An SMC (sheet molded compound) or BMC (bulk molded compound) sealed with a primer coat producible with the aid of the process as claimed in claim 6.
- 15 8. The use of an SMC (sheet molded compound) or BMC (bulk molded compound) as claimed in claim 7 to produce automobile parts.
- 20 9. An automobile comprising SMC (sheet molded compounds) and/or BMCs (bulk molded compounds) as claimed in claim 7.
- 25 10. A process for producing a clearcoat or a multicoat color and/or effect coating system, in which at least one clearcoat film of a coating material curable thermally and with actinic radiation is applied to the surface of a primed or unprimed substrate or, wet-on-wet, to the surface of a basecoat film and, if appropriate, is cured together with the basecoat film, which comprises using as coating material the coating material as claimed in any of claims 1 to 3.
- 30 11. A clearcoat or multicoat color and/or effect coating system, producible with the aid of the process as claimed in claim 10.
- 35 12. A motor vehicle, plastics part, furniture item or other part for private or industrial use, including coils and containers, comprising at